DIVISION 1 – GENERAL REQUIREMENTS

SECTION 01101
CONSTRUCTION EXECUTION AND COORDINATION

PART 1 GENERAL

1.1 SUMMARY

A. Specifies specification format, Contractor's onsite staff requirements, use of project site, project planning and controls, coordination meetings, and government-furnished items.

1.2 SUBMITTALS

A. Submit, in accordance with Section 01331, Construction Submittals, the following:

1. Organization Chart: Submit to Project Director/COR as required by Contract.
2. Staff Resumes and Qualifications: Submit for principal staff identified on the organization chart.
3. Occurrence Report: Submit to Project Director/COR within twenty-four (24) hours of each occurrence.

1.3 ONSITE STAFF REQUIREMENTS

A. Provide an adequate professional administrative and supervisory staff on site in all aspects of the work. Staff may be assigned multiple areas of responsibilities. This key staff shall be fully coordinated and provide a professional level of project execution management. The Contractor shall assign an Architect or Engineer with a minimum of five years field experience on similar size/complexity projects.

B. Project Organization Chart:

1. Depict principal staff assignments and contact information on a project organization chart. Include key administrative and supervisory staff.
2. Provide resumes of key staff.
3. Depict how management, supervisory, and administrative functions will be performed. Where applicable, indicate where multiple tasks will be performed by the same individual.

C. Each entity engaged in the performance of the work, including product manufacturing, handling materials/products, fabricating, installing, working to dimension, finishing, testing, and similar operations, shall be familiar with referenced standards applicable to that entity's operations.

D. Staff shall be qualified for the work performed as documented by certifications, licenses, permits, test reports, judgments, and similar documentation.

1.4 USE OF PROJECT SITE

A. Contractor is limited in its use of the project site. See appropriate attachment at Contract Section J for Project Site boundaries.

B. Protection:

Adjacent Properties: Prevent and repair damage to surrounding and adjacent properties arising from performance of the work.

C. Ensure that surplus, waste, and rejected material is promptly removed from the Project Site, disposed of as specifically identified under appropriate Contract clauses, and that the Project Site is not used for the sale of such material. Onsite waste disposal, including burial or burning, of any materials will not be permitted.

D. Occurrence Report: Report, in writing, notice of any and all unusual events and discoveries at the Project Site such as unexpected weather phenomena, exceptional visitors, and unusual encounters during excavation, or similar occurrences.

E. USG reserves the right to place and install equipment as necessary in completed areas of the building and to occupy such completed areas prior to Substantial Completion, provided that such occupancy does not substantially interfere with completion of the work. Such placing of equipment and partial occupancy shall not constitute acceptance of Contractor's works entire or in part.

1.5 PROJECT SITE HOURS OF OPERATIONS

A. Unless otherwise agreed upon in writing, work shall be performed only during the workdays and hours delineated in the Contract Package.

B. Excepted Operations:

1. The only work permitted outside of work hours or days specified above will be due to special circumstances, such as in completion of on-going concrete operations—continuous placing, casting, and curing. Provide written request to Project Director/COR at least twenty-four (24) hours in advance of such operations, and obtain the written acceptance of Project Director/COR prior to scheduling any such work. Any additional costs incurred by the USG (including but not limited to, supervision, security, and inspection) resulting from extended Contractor work hours or days shall be reimbursed to USG by Contractor.
2. Should Contractor desire to change Contract work hours or days specified above, submit to Project Director/COR a proposal, fully justifying any such change, for Contract Modification. Justification shall contain, at a minimum, a detailed discussion of potential impacts to the Project Execution Schedule and related cost impacts.
3. Project Director/COR will review the proposal and forward a recommendation to the Contracting Officer, who will make the final determination, and, if the change is accepted, issue a modification to

the Contract. Any additional costs incurred by the USG (including but not limited to supervision, security, and inspection) resulting from this type of Contract Modification shall be reimbursed to USG by Contractor.

PART 2 PRODUCTS (NOT USED)

PART 3 EXECUTION

3.1 GENERAL

A. Coordinate all phases and aspects of the work to achieve intended results, including best overall visual effect for all exposed work, regardless of trade or material. Remove and replace workmanship that is found in non-compliance.

B. Provide material lay out areas so as to ensure the safety of all staff, employees, and visitors to the Project Site and security for the materials contained therein.

C. Product Compatibility:

1. Compatibility of products in relation to interfacing work is a basic requirement of each product selection. Where product options are open for Contractor's selection, that selection must be compatible with interfacing products.
2. Where products interface, coordinate selections for compatibility prior to procurement of any of these products and without regard for sequence of each product's installation. Advise Project Director/COR of compatibility problems that cannot be reconciled.
3. Product non-compatibility that results from Contractor's incorrect selection from options is not an allowable basis for Contract Modification.
4. Coordinate selections, through Project Director/COR, with products already selected and procured under separate contracts or by the USG; request information on such products.

D. At the earliest feasible date, and as applicable, provide temporary enclosure and lock-up of each separate portion of the new construction. Protect completed work in every reasonable way, so as to ensure undamaged condition at time of Substantial Completion or turn over to the USG.

E. The Contractor shall be responsible for all materials delivered and work performed until completion of the work and final acceptance by the USG as defined herein, except for any completed unit of work which may have been previously accepted under the Contract.

3.2 PROJECT EXECUTION AND CONTROL SYSTEM

A. Utilize a computerized document management system to consolidate and manage, at a minimum, the following documentation on the Project:

1. Submittal Tracking and Documentation: Refer to Section 01331, Construction Submittals.

2. Project Scheduling: Refer to Section 01321, Project Scheduling.
3. Contractor's payment applications.
4. Requests for Information.
5. Change Orders.

3.3 COORDINATION MEETINGS

A. Pre-Construction Conference:

1. It shall be scheduled according to the Main Contractor indications.
2. Attendees shall include Project Director/COR and a representative from each contract entity, both USG and Contractor, executing the work during first quarter of scheduled construction period.
3. Agenda items shall include a review of the general plans, conditions, procedures, and requirements as necessary for the effective scheduling and prosecution of the construction. Parties shall review security and material delivery requirements, personnel assigned, and communication procedures as established for the Project.
4. Where and when feasible, meeting shall be scheduled and conducted at the Project Site. If not feasible, meeting shall be at a location selected for the greatest convenience of the majority of attendees.

B. Construction Coordination Meetings:

1. Contractor and Project Director/COR will hold weekly meetings (either in site or Conference calls) to discuss schedule and status of outstanding issues, commencing immediately upon mobilization to the Project Site.
2. These meetings are intended to promote a full exchange of information between USG and Contractor, promote open and honest discussion between parties, and identify areas of concern by each party. All parties shall seek expeditious resolution of issues before they become problems.
3. Recommended Agenda:
   a. Submittal Register: Review current status of design and construction submittals:
   b. Visitors: Review list of scheduled visitors.
   c. Quality Control: Review outstanding issues.
   d. Safety: Review outstanding issues.
   e. Security: Review outstanding issues.
   f. Project Progress: Report of Procurement and construction progress effective the AS OF date.
   g. Requests for Information (RFI): Review RFI log and identify outstanding RFI's that may impact the schedule.
   h. Change Orders: Review the log of outstanding change orders.
   i. Correspondence: Review correspondence between Project Director/COR and Contractor.
4. Meeting Minutes: Provide meeting minutes in agenda format to Project Director/COR the next working day after each meeting.

3.4 GOVERNMENT-FURNISHED ITEMS

A. As delineated in Contract, USG may provide equipment or material for either USG installation or Contractor installation, designated as GFGI and GFCI, respectively.

B. Government-Furnished Furniture: Support infrastructure and terminate electrical connections as necessary for proper operation.

END OF SECTION

PART 1 GENERAL

1.1 SUMMARY

A. The Contractor's Project Execution Schedule (PES) is the key legal document in the representation of the Contractor's plan for execution of all Work under the Contract. The PES shall be the Contractor's working schedule and shall be used to plan, organize, and execute the construction work.

B. The purposes of the PES are to

1. Assure, at all times, coordination of the Work of the Contractor, the various subcontractors, material suppliers, and all other parties associated with the construction of the Project.

2. Record and report actual performance and progress.

3. Assist the Contractor and USG in monitoring the progress of the Work and evaluating any time impact(s) associated with changes, proposed changes, or performance delays upon the PES and dates of Substantial Completion and Final (Contract) Completion.

4. Assist the USG and Contractor in preparing and evaluating the Contractor's monthly Applications for Payment.

5. Demonstrate how the Contractor plans to complete all remaining Work as of the end of each progress reporting period.

1.2 RELATED DOCUMENTS

A. Refer to Section 01101, *Construction Execution and Coordination*, for information on format and content of submittal register, shipping log, and materials tracking schedule.

B. Refer to Section 01331, *Construction Submittals*, for procedures for submitting project execution schedules and other deliverables described in this Section.

C. Refer to Section 01771, *Closeout Procedures*, for information related to inspections to be included as activities in the project execution schedule.

1.3 SUBMITTALS

A. Project schedule deliverables shall be submitted and reviewed in accordance with the requirements in Section 01331, *Construction Submittals*.

B. Project schedule deliverables shall be certified by the Contractor's Project Manager (PM) in accordance with certification procedures described in Section 01331, Construction Submittals.

C. PES review comments made by USG will not relieve Contractor from compliance

with requirements of the Contract Documents.

D. Submit the following in accordance with Section 01331, "Construction Submittals"

Project Execution Schedule

a. Acceptance is a prerequisite to issuance of the full NTP for Construction

b. The preferred scheduling software is Microsoft Project.

c. Provide sufficient detail to establish a reasonable critical path and demonstrate sufficient planning to assure on time project completion.

d. Include, as a minimum, the following milestones

- Contract Award
- Notice to Proceed (NTP) for construction
- Construction Document Submittal
- Construction Document Backcheck Submittal
- Full Notice to Proceed (FNTP)
- Substantial Completion
- Contract Completion
- Final Acceptance

e. Others activities to be considered:

- Administration activities (obtain permits, bonds, insurance, etc.)
- Mobilization and demobilization activities
- Deliveries of government-furnished materials and equipment for Contractor installation (GFCI), delivery and installation of government- furnished materials and equipment (GFGI).
- Activities defining approvals required by regulatory agencies or other third parties
- Preparation, certification, submittal, and acceptance of all construction execution submittals
- Subcontract work
- Project closeout activities, including Substantial Completion, Contract Completion, and Final Acceptance

f. **Final As-built Schedule Report**

Acceptance by PD/COR is a prerequisite to

- Release of final payment
- Final Acceptance Certification

k. **For all scheduling deliverables,**

1. Submit monthly by e-mail
   a. Monthly Schedule Progress Report
   b. Gantt (bar) charts of the following schedule layouts
      - Critical Path
      - Activities in progress and completed during the reporting period.
      - All activities organized and grouped according to the activity

1.4 USG REVIEW PROCESS

A. Under no circumstances does Project Director/COR "acceptance" of a PES revision modify, or imply a modification to, any aspect of the Construction Contract or Contract Duration.

B. At the request of the Project Director/COR the Contractor shall be required to participate in any meetings necessary to reach a mutual agreement of any progress report item, or any revisions thereof.

C. The Project Director/COR may request additional information as a result of the review process and the Contractor shall comply with such request.

D. If any of the required Contractor submissions are returned for correction, addition, or revision, then they shall be resubmitted, as prescribed above, within 10 working days after the request for resubmission.

E. If the Contractor fails to submit any submittal, or update thereto, or any other information required under this Section, then the USG may withhold approval of the Contractor's payment application until the Contractor submits the required information.

PART 2 PRODUCTS (NOT USED)

PART 3 EXECUTION

3.1 SCHEDULING TOOLS

A. Software

1. The preferred scheduling software is Microsoft Project.

END OF SECTION

SECTION 01331
CONSTRUCTION SUBMITTALS

PART 1 GENERAL

1.1 SUMMARY

A. Describes procedures required in the submittal of construction deliverables and provides general submittal descriptions and processing standards.

1.2 SUBMITTALS

A. Submit the following:

1. Submittal Register: Update and submit for review every Week.

PART 2 PRODUCTS (NOT USED)

PART 3 EXECUTION

3.1 GENERAL

A. Transmit all construction submittals to Project Director/COR for appropriate action.

B. Review all Contract Documents and project requirements and generate a complete list of deliverables to be transmitted as submittals. Ensure all deliverables are considered in the project execution plan and are entered, coded, and tracked in the automated Project Execution and Control System.

C. Submittal Register: This register shall become a part of the final project record set.

D. Plan and coordinate all submittal acceptance processes from the initial transmittal through installation and acceptance of the work. Seek to normalize all submittals and eliminate duplicative actions.

3.2 CONSTRUCTION EXECUTION SUBMITTALS

A. Product Data:

1. Collect and submit product data for manufactured material required in each unit of work, usually as defined by related technical section of Contract Specifications. Where selection of related products is reflected directly in the preparation of shop drawings, submit product data sufficiently in advance of the submittal to gain acceptance prior to the completion of shop drawings.
2. Choices: Mark manufacturer’s standard product data sheets to show clearly which choices have been made. Identify choices, usually restricted to color, pattern, texture, and similar attributes, available for USG selection. Delete or strike out information not applicable to the choice selection process.
3. Include manufacturer's installation instructions, recommendations for handling, maintenance, protection, testing, start-up, and other procedures as may be applicable.
4. Where product data must be custom-produced (not available as manufacturer's standard printed information), submit as shop drawings in accordance with applicable requirements.

B. Shop Drawings:

1. Prepare newly-developed shop drawings (not marked-up drawings) to show how the combination of products and/or fabricated materials will be installed. These drawings shall form specified units of work and interface with other units of work or existing work, including “systems” of the building construction. Level of detail must be more than a copy of Project drawings. Shop drawings must include a level of detail to completely describe the work product proposed.
2. Include drawings for fabrication, installation, setting, patterning, templates, and similar purposes; show appropriate materials and product use schedules in each set. Identify each component and show the full set of relevant dimensions, with specific notation as to which

dimensions are based upon field measurements. Include performance and test ratings as may be applicable to assemblies shown by the shop drawings.

3. By special notations, indicate variations, if any, from the accepted design documents. Variations shall be submitted for acceptance as described herein.
4. Media, Copies:
    a. Sheet Sizes: Minimum 210 x 297 mm; except where larger dimensions are necessary for legibility, actual-size patterns, templates, and similar required drawings; and as may be agreed upon with Project Director/COR for other unique shop drawing requirements. Shop drawings shall be uniformly sized unless agreed upon otherwise by Project Director/COR.

C. Field Samples:

1. Where required by Specifications, provide samples of actual materials/equipment/assemblies; at full-scale size, fully fabricated, and complying with physical requirements as shown and specified.
2. Quality Control: Where samples are required for the purpose of achieving quality control, prepare appropriately for inspection and testing by recognized methods as indicated.

3.3 ADMINISTRATIVE SUBMITTALS

A. Submittals associated with the performance of the construction work, but not directly controlling construction execution or specifically related to closeout and completion. Requirements for administrative submittals are generally included in these Division 1 Sections.

B. Media/Copies: Unless otherwise specified in these Division 1 Sections or Contract Section F, provide five (5) copies of administrative submittals to Project Director/COR. Selected administrative submittals may be submitted electronically as provided in Contract Section F.

C. Categories of required administrative submittals include, but are not limited to:

1. Submittals related to temporary facilities layout and construction.
2. General and Special Reports: Includes minutes of meetings, safety and accident reports, security regulation compliance reports, etc.

3. Progress Reports: Includes regular submission of submittal register, project progress documentation, etc.
4. Inspection and Test Schedules and Reports: Includes quality control documentation, related certifications of compliance, field samples and mockups, surveys and measurements, and other field engineering submissions.

3.4 CLOSEOUT SUBMITTALS

A. Refer to Section 01771, Closeout Procedures for Record Document submittals and Section 01781, Operation and Maintenance Data for O&M -related submittals.

3.5 SUBMITTAL TYPE CODING AND DESCRIPTIONS

A. Type coding shall be used in the transmittal document and as a data point/field as part of the automated project execution control system. The following are suggested coding schema for the respective submittal types. Each presents a three-place code, first and second places are alphabetic, describing the general submittal type; the third (and subsequent) place is numeric, describing a specific submittal type.

B. Product Data (PDx):

1. PD1, Manufacturer's Catalog Data: Data composed of catalog cuts, brochures, circulars, specifications, and product data, and pre-printed information in sufficient detail and scope to verify compliance with requirements of Contract Documents. Clearly mark manufacturer's standard and optional components for each product which has been selected to meet Contract requirements.
2. PD2, Manufacturer's Standard Color Charts: Preprinted illustrations displaying choices of color, texture, and finish for material or product.
3. PD3, Instructions: Preprinted material describing installation of a product, system, or material, including special notices and Material Safety Data Sheets, if any, concerning impedance, hazards, and safety precautions.
4. PD4, Standard Test Reports: A report signed by authorized official of testing laboratory stating that material, product, or system identical to material, product, or system to be provided has been tested in accordance with requirements specified. Test report shall identify test method and material, state that test was performed in accordance with test requirements, state test results, and indicate whether material, product, or system has passed or failed test. Testing shall have been within three years of date of award of this Contract.
5. PD5, Manufacturer's Certified Drawings: Dimensioned drawings of product, including components, and schedule of performance data; including manufacturer's certification that product shown and to be provided complies with requirements of Contract Documents. The certified drawings shall be dated after award of this Contract. Include

project name, contract number(s), supplier's name and address, certifier's name, and list of specific requirements which product is intended to address.

6. PD6, Other Product Data: Other product data not included in above categories.

C. Shop Drawings (SDx):

1. SD1, Data: Submittals which provide calculations, descriptions, or other documentation regarding the work.
2. SD2, Drawings: Submittals which graphically show relationship of various components of the work, schematic diagrams of systems, detail of fabrications, layout of particular elements, connections, and other relational aspects of the work.
3. SD3, Schedules: A tabular list of data, or tabular list including location, features, or other pertinent information regarding products, materials, equipment, or components to be used in the work.
4. SD4, Statements: A document, required of Contractor, or through Contractor by way of supplier, installer, manufacturer, or other lower tier Contractor, the purpose of which is to further the quality or orderly progression of portion of the work by documenting procedures, acceptability of methods or personnel, qualifications, or other verification of quality.
5. SD5, Certificates: Statements signed by responsible officials of manufacturer of product, system, or material attesting that product, system, or material meet specified requirements. The statements shall be dated after award of this Contract, name project, and list specific requirements which it is intended to address.
6. SD6, Coordination Drawings: Submittals which graphically show coordinated location of items specified in more than one specification section.
7. SD7, Other Shop Drawings: Other shop drawing submittals not included in above categories.

D. Field Samples (SAx):

1. SA1, Samples: Samples, including both fabricated and unfabricated physical examples of materials, products, and units of work as complete units or as portions of units of work.
2. SA2, Color Selection Samples: Samples of available choice of colors, textures, and finishes of product or material, presented over substrate identical in texture to that proposed for the work.
3. SA3, Sample Panels: An assembly constructed at Project Site in a location acceptable to Project Director/COR, and using materials and methods to be employed in the work.
4. SA4, Sample Installations: A portion of assembly or material constructed and placed in location directed and, if accepted by Project Director/COR, retained as part of the work.

5. SA5, Mock-ups: A special form of sample submittal; to be prepared near the point of actual installation for USG examination. Mockup may be, at Contractor's risk and with concurrence of Project Director/COR, constructed as the first segment of the actual work. Refer to Contract Drawings, and related shop drawings, for size and location information of mock-ups; and refer uncertainties to Project Director/COR for resolution.
6. SA6, Other Field Samples: Other samples not included in above categories.

E. Administrative/Other (ADx):

1. AD1, Inspection Reports: Reports of inspection. Each report shall be properly identified.
2. AD2, Factory Test Reports: A written report which includes findings of test required to be performed by Contractor on actual portion of the work or prototype prepared for this project before it is shipped to Project Site. The report shall be signed by authorized official of testing laboratory, and shall state that test was performed in accordance with test requirements, state test results, and indicate whether material, product, or system passed or failed test.
3. AD3, Field Test Reports: A written report which includes findings of test made at Project Site, or on sample taken from Project Site, on portion of the work during or after installation. The report shall be signed by authorized official of testing laboratory or agency, and shall state that test was performed in accordance with test requirements, state test results, and indicate whether material, product, or system passed or failed test.
4. AD4, Other Administrative Submittals: Other administrative submittals not included in above categories.

F. Closeout (COx):

1. CO1, Record Document Submittals: Specific requirements for record as-built drawings and project coordination drawings are identified in Section 01771, Closeout Procedures.
2. CO2, Operation and Maintenance Manuals: Data intended to be incorporated in an Operations and Maintenance Manual; refer to Section 01781, Operation and Maintenance Data.
3. CO3, Warranties: Specific warranties required for portions of the work; refer to Section 01781, Operation and Maintenance Data.
4. CO4, Spare Parts: Spare parts and extra stock; refer to Section 01781, Operation and Maintenance Data.
5. CO5, Other Closeout Submittals: Other submittals as identified in Section 01771, Closeout Procedures, not included in above categories.

3.6 SUBMITTAL PROCESSING

A. Submittal Identification:

1. Provide a label, title block, and transmittal sheet on each submittal, attached securely, identifying the following:
   a. Project name and number, date of related Contract Documents, and date of submittal.
   b. Name, address, and telephone number of Contractor's point of contact responsible for the preparation of the submittal.
   c. Name, address, and telephone number of the following, as applicable: Contract A/E of Record, Construction Contractor, subcontractor, supplier, manufacturer, or fabricator.
   d. Reference numbers and titles of Specification Sections and Contract Drawings, including related details, submittals, and similar cross-references.
2. Transmittal Sheets:
   a. The signed transmittal document serves as a record of the transmittal action.
   b. Maintain records of transmitted submittals, by dates, following the required procedures for the Submittal Register.
   c. Include a place for the printed name, signature, and date of Project Director/COR as receiver of the transmittal.
   d. Provide an appropriate place for each entity involved to record, by signature and date, the receipt, review, and respective action, acceptance, and limitations, if any.
   e. Provide place for record of certification.
3. Sample Transmittal Form. A sample Transmittal Form is provided as an attachment to this Section.

B. Variations from Specifications and Drawings:

1. If submittal contains a proposal for variation from the accepted specifications and drawings, specifically describe such variation in writing and provide justification. The transmittal shall clearly identify documents proposing variations. Likewise, the submittal materials themselves shall be clearly annotated. Identify all potential scope, cost, time, and quality changes at time of submittal.
2. A/E Certification: Each transmittal delivering submittals containing proposed variations shall be certified as described herein.
3. USG submittal acceptance shall be prerequisite of the initiation of the respective work element(s). Any work executed absent USG acceptance of the proposed variations shall be at Contractor's risk.
4. Should the submittal result in the acceptance of the proposed variation, and should such variation affect the Contract scope, cost, time or quality, Project Director/COR will request that the Contracting Officer negotiate and issue an appropriate Contract Modification. If acceptance does not affect the Contract scope, cost, time or quality, Project Director/COR may accept the variation or substitution in writing.

5. Contractor shall not presume that acceptance by the USG of a specific request for variation is a general acceptance of similar variations from the specifications and drawings. By the action of modification, the variation is accepted as a performance standard.
6. Nothing stated herein shall relieve Contractor of the responsibility of notifying Project Director/COR of any part of the Contract Documents (clauses, drawings or specifications) which Contractor knows, or reasonably should have known, might result in patent or latent defects in the completed works.

3.7 USG SUBMITTAL REVIEW

A. General:

1. Review Period:
   a. USG review period for construction submittals (including RFIs) shall be fourteen (14) calendar days following receipt of submittal by USG, unless specified otherwise in the Contract Documents.
   b. Submit construction submittals to provide the full review period prior to planned commencement of the procurement and work activity.
   c. No work shown on said submittals shall be executed within the review period without prerequisite acceptance by Project Director/COR.
2. Submit construction execution submittals to USG “For Information Only”, without limitation to the right of the USG to review any or all submittals. Important exceptions include the following submittals, which shall be submitted for USG acceptance:
   a. Re-submission of submittals previously reviewed with USG disposition “Rejected; Resubmit (RR)”.
   b. Submittals containing variations from Contract specifications and drawings.
   c. Submittals related to review of design deliverables in which review comments were not adequately addressed and closed during design review.
   d. Submittals identified in the design review process with specific request for USG acceptance prior to construction.
   e. Submittals related to temporary facilities layout and construction.
3. Selected construction submittals “For Information Only” will be reviewed by Project Director/COR in conjunction with the USG Quality Assurance Program. All construction submittals for USG acceptance will be reviewed by Project Director/COR.
4. Project Director/COR will review submittals within the specified review period. Submittals that are “For Information Only” may be presumed to have a USG disposition of “Accepted as Submitted (AS)” if other disposition or comments are not received within the specified review period.
5. USG acceptance of submittals reflects an acknowledgement that the submittal is in general compliance with the intent of the Contract Documents. Acceptance by the USG shall not:
   a. Permit any departure from the Contract requirements.
   b. Relieve Contractor of responsibility for errors and omissions,

including details, dimensions, material, etc., either patent or latent.

c. Authorize a departure from details appearing on accepted construction specifications and drawings.

6. Upon acceptance of each submittal, the USG shall have unlimited rights in all drawings, designs, specifications, notes and other work developed in execution of the works.

B. Submittal Disposition: As a result of review, Project Director/COR will mark submittals as follows:

1. ACCEPTED AS SUBMITTED (AS) or ACCEPTED AS NOTED (AN): No requirement for re-submittal; items require only USG recognition. Submittal meets the intent of the Contract Documents. Final acceptance shall depend upon that same compliance.
2. ACCEPTED FOR INFORMATION ONLY (IO): Accepted without waiving the requirement for the work to comply with the Contract Documents. Final acceptance shall depend upon compliance.
3. REJECTED; RESUBMIT (RR):
   a. Submittal does not meet Contract intent. Corrections are required of submittal defects noted or of deficiencies in the proposed work as represented by the submittal.
   b. Contractor shall not proceed with purchase, fabrication, delivery, or other related execution of the work until acceptance is granted.
   c. Contractor shall not allow rejected submittals to be in use or in evidence where work is in progress, either at the Project Site or elsewhere.
   d. Should Project Director/COR determine USG disposition of Rejected; Resubmit, Contractor will be notified in writing within the specified review period.
   e. Correction of noted defects or deficiencies shall be re-submitted for USG acceptance.
   f. Contractor shall bear all risk in the submittal – rejection – re-submittal cycle; submittal rejection shall not justify extension of Contract duration.

3.8 SUPPLEMENTS

A. The supplements, listed below, following “End of Section”, are a part of this Specification:

1. Material/Product Substitution Request Form
2. Sample Submittal Register/Log/Schedule
3. Sample Transmittal Form

END OF SECTION

MATERIAL/PRODUCT SUBSTITUTION REQUEST FORM - (D/B CONTRACT)

Date: _____

Project:

_____

A/Es of Record: (enter appropriate Architect and Engineer of Record of the Design/Bid/Build Contract Documents)

Architect of Record	Mechanical Engineer of Record	Electrical Engineer of Record	Fire Protection Engineer of Record

Contractor:

_____

Within 30 days after the construction NTP, this formal request will be considered for substitution of products specified as minimum standard. After the end of this period, substitution requests will be considered only if the specified product or material is no longer available or deemed unsatisfactory for the intended function.

Specified Material/Product_____

Specification Division – Section _____

Specified Manufacturer/Origin _____

Proposed Substitution _____

Proposed Manufacturer/Origin _____

Proposed Supplier/Source _____

Attached hereto are the specification, data, performance documents and standard laboratory test results supporting the product substitution.

The following criteria has been taken into consideration

- The use of this material/product is applicable to this product in the prescribed location and will be warranted in the same manner as the specified product for a period of____years, when applied and used as per the manufacturers guidelines.
- The substitution of this product will not affect the dimensions shown on the drawing in any way.
- This product substitution will not affect the work of other trades working on this product.
- This product will not affect the expected Commissioning Functional Performance Test results.

The advantages of incorporating the proposed substitution into this Project are as follows: _____

_____

_____

_____

Submitted By:_____**of**_____

T**his completed form is to be sent to OBO Project Director with the required submittal.**

SUBMITTAL REGISTER/LOG/SCHEDULE	PROJECT, LOCATION, NUMBER: New Office Building Compound Capital Big City, ABC Land XJ-AA1234	CONTRACT NUMBER S-OBO AD 02 – G-12345 Mods 001 - 010
		REPORT DATE: 01 January 2009 — Page 1 of 23

SUBMITTAL NUMBER	SPECIFICATION		SUBMITTAL		CONTRACTOR DATES				USG DATES, ACTIONS						
	SECTION NUMBER	PARAGRAPH NUMBER	TYPE	DESCRIPTION	SCHEDULED SUBMISSION	ACTUAL SUBMISSION	ACCEPTANCE NEEDED BY:	MFGR WARRNTY EXPIRATION	CONTRACTOR. WARRANTY EXPIRATION	SUBMITTAL REVIEW AGENT		RECEIVED BY REVIEW AGENT	RETURNED TO PROJECT DIRECTOR/ COR	RETURNED TO CONTRACTOR	STATUS CODE
										ON SITE	OTHER				
	01300	1.2.3.4	DD2	Conformance Design Documents (35%)											
	01300	1.2.3.5	DD3	Interim Design Documents (60%)											
	01300	1.2.3.6	DD4	100% Design Documents											
	01314	1.0.C.1	IPS	Initial Project Schedule											
	01321	1.3.F.2	DPS	Detailed Project Schedule											
	02221	2.1.D.2.a)	SD4	Trenching, Backfilling and Compacting for Utilities											
	02511	2.3.C.1	AD1	Hot-Mixed Asphalt Paving											
	02511	2.3.C.2	AD3	Aggregate gradations											
	02511	2.3.F.2	AD3	Asphalt cement											
	02514	02514	SA3	Exposed Aggregate Concrete Paving											
	02514	02514	PD3	Mix Design											
	02514	02514	PD3	Material List and Source											
	02514	02514	SA1	Admixtures and Accessories											
	02514	02514	SA1	Aggregate											
	02514	02514	SA5	Reinforcement											
	02514	02514	SA1	Joint Fillers											
	02514	02514	SD5	Concrete											

NOTE: Sample is provided as a suggested format only; generate actual using automated Project Execution and Control System and modify as needed to create the most effective management tool possible.

TYPE LEGEND SD = SHOP DRAWING, AD = ADMINISTRATIVE DATA, PD = PRODUCT DATA, AND SA = SAMPLE

TRANSMITTAL	DATE: 31 December 2099	NEW:		INFORMATION:		ORIGINAL SUBMITTAL DATE: (31 December 2099) (N/A)
		RESUBMITTAL:				

TO:	FROM:	PROJECT NAME, LOCATION, NUMBER:	CONTRACT NUMBER:
US Department of State Overseas Building Operations	ABC Contractors, Inc. Field Address Line 1 Field Address Line 2	New Office Building Compound Capital Big City, XYZ Land XJ-AA1234	S-OBO AD 03 – G-12345 Modifications: 001 - ???

ITEM NO.	SUBMITTAL NUMBER	SPECIFICATION		SUBMITTAL						
		SECTION NUMBER	PARAGRAPH NUMBER	DESCRIPTION	TYPE	NUMBER OF COPIES	DRAWING SHEET NUMBER	VARIATION	STATUS CODE	
1										
2										
3										
4										
5										
6										
7										
8										

I certify that the submitted items listed in this transmittal have been prepared in strict conformance with the Contract Documents. When submittals propose substitutions or deviations, these are identified on this transmittal form and clearly annotated in the material presented.

Bill/Bertha B. Bubba — **Date**
Project Manager,
ABC CONTRACTORS, INC.

I certify that I have reviewed in detail the submitted items listed in this transmittal. They are complete and correct, and are in full compliance and strict conformance with the Contract Documents. When submittals propose substitutions or deviations, these are identified on this transmittal form and clearly annotated in the material presented.

CAL/CONNIE C. CANDY — **DATE**
CONTRACT A/E OF RECORD

DALE/DEBBIE D. DANDY — **DATE**
OTHER RESPONSIBLE DESIGN PROFESSIONAL

ACCEPTANCE:

Alex/Amy A. Able — Date
OBO Project Director/COR

REMARKS:
1) Remarks
2) Remarks
3) Remarks
4) Remarks

TYPE CODES:

ADx	Administrative/Other
PDx	Product Data
SDx	Shop Drawings
COx	Closeout
SAx	Field Sample

STATUS CODES:

AS	Accepted as submitted
AN	Accepted as noted
IO	Accepted for Information Only
RR	Rejected; Resubmission Required

NOTE: Sample is suggested format; Contractor may modify to improve as management tool; see text for code explanation.

SECTION 01401
CONTRACTOR'S QUALITY CONTROL

PART 1 GENERAL

1.1 GENERAL

A. The Contractor shall be solely responsible for quality control and perform the required actions, except where specifically indicated to be performed by the USG or others; and include specified surveillance, inspection, testing, measuring, reporting, and correction-of-defects.

B. The Government will audit Contractor's quality control activities and records to ensure that the QC program is functioning properly and providing the level of quality specified in the Contract.

C. Completion of required quality control actions on a unit of work shall not relieve the Contractor of responsibility for compliance with other requirements of the Contract Documents.

D. Specified requirements for quality control are not intended to limit Contractor's or fabricators' procedures that achieve compliance with the requirements of the Contract Documents; nor are they intended to limit related requirements which may be imposed by other provisions hereof, or by the USG or governing authorities.

1.2 DEFINITIONS

A. Quality Control (QC): Refers to collective actions required to ensure that fabricated and installed materials/equipment/systems comply with Contract Documents and regulations.

1.3 SUBMITTALS

A. Submit, in accordance with Section 01331, Construction Submittals, the following:

1. Submit a listing of all Contractor QC assignments; resubmit any changes made during project.

1.4 INCIDENTAL SERVICES

A. Provide incidental services by engaged quality control agencies/services, including services performed by the USG directly or by services the USG may engage. Incidental services include, but are not necessarily limited to the following:

1. Use of Contractor quality control testing laboratory located near the Project Site.
2. Assistance in gaining access to the works and the taking of test samples, where requested by quality control agency; the subsequent

repair of work and substrates.

3. Handling, curing, storage and protection of test samples at the Project Site.

PART 2 PRODUCTS (NOT USED)

PART 3 EXECUTION

3.1 QUALITY CONTROL SERVICES

A. Where indicated, provide an independent agency to perform specified QC services, including, but not limited to sample-taking, testing, analysis, reporting, and similar activities.

B. Where indicated, engage professional QC services to perform inspections associated with or required in connection with QC activities, including written confirmation that materials being used in the work comply with the requirements of the Contract Documents.

C. Completion Inspection:

1. At the time each unit of work or separate increment thereof is Substantially Complete, and regardless of whether subjected to specific QC inspection and testing, conduct a completion inspection.
2. Notify Project Director/COR at least twenty four (24) hours in advance of completion inspections for any portion of the work so that USG can witness the inspection before work is concealed.
3. Develop a Schedule of Defects to be corrected on non-complying elements; include in QC documentation.
4. Include in any report the dates established or estimated for the completion of corrections, as required by Section 01321, Project Scheduling, and Section 01771, Closeout Procedures.

3.2 TEST EQUIPMENT

A. Provide and maintain in good repair and operating condition all test equipment required for compliance with the QC Activities.

B. Test equipment shall be of sufficient quality and accuracy to provide valid results in accordance with standard test methods.

C. Calibrate test equipment in accordance with industry standards or manufacturer’s recommendations. Perform validation of equipment calibration in accordance with standard test methods. Make documentation of calibration available to the Project Director/COR upon request.

3.3 CORRECTION OF WORK

A. Provide corrective actions where Contractor’s QC procedures, or those undertaken by or for the USG, disclose patent or latent defects in the works.

B. Corrective actions shall be acceptable to the Project Director/COR and shall seek to upgrade, repair, restore, reconstruct, replace, or otherwise correct

defects in the works to comply with Contract Document requirements.

C. Re-inspect or re-test corrected work, comparable with that required for initial work.

D. Where independent inspection/testing services conducted by the USG have disclosed defects, the USG will perform re-inspection or re-testing of corrected work at the Contractor's expense.

E. Neither the required quality control procedure, nor detection of defects, nor correction of defects, nor the re-inspection or re-testing of corrected work, provides a basis for Contractor's claim for Contract Modification/Additional Compensation, or request for extension of Contract Time.

3.4 RESTORATION AND PROTECTION

A. Restoration: Upon the completion of inspection, sample-taking, testing, and correction of defects; repair damaged work and substrates, and restore finishes to eliminate deficiencies in visual and performance qualities in compliance with the Contract Documents.

B. Continued Protection: Provide continued protection of completed work through the remainder of the Construction Time, and monitor protective measures in relation to construction activities.

3.5 RECORDS

A. Maintain complete record or log of QC actions, ready for the Project Director's/COR's examination at any time. Highlight defects, deficiencies, and non-compliance found; along with corrective actions/reconstruction completed, to be completed, or recommended for acceptance by the Project Director/COR.

END OF SECTION

CONTRACTOR'S QUALITY CONTROL REPORT (CQC) (ER 1180-1-6)	DATE	REPORT NO.
CONTRACT NO. AND NAME OF CONTRACTOR:	DESCRIPTION AND LOCATION OF THE WORK:	

WEATHER CLASSIFICATION:	CLASSIFICATION:
CLASS A No interruption of any kind from weather conditions occurring on this or previous shifts. CLASS B Weather occurred during this shift that caused a complete stoppage of all work. CLASS C Weather occurred during this shift that caused a partial stoppage of work. CLASS D Weather overhead excellent or suitable during shift. Work completely stopped due to results of previous adverse weather. CLASS E Weather overhead excellent or suitable during shift but work partially stopped due to previous adverse manner. OTHER Explain.	CLASS _____ TEMPERATURE: MAX ____ MIN ____ PRECIPITATION: INCHES _____

CONTRACTOR/SUBCONTRACTORS AND AREA OF RESPONSIBILITY FOR WORK PERFORMED TODAY: (Attach list of items of equipment either idle or working as appropriate.)

a. _____
b. _____
c. _____
d. _____
e. _____
f. _____

1. WORK PERFORMED TODAY: (Indicate location and description of work performed. Refer to work performed by prime and/or subcontractors by letter in Table above.)

2. TYPE AND RESULTS OF INSPECTION: (Indicate whether P-Prepatory, I-Initial, or F-Followup and include satisfactory work completed or deficiencies with action to be taken.)

3. TESTS REQUIRED BY PLANS AND/OR SPECIFICATIONS PERFORMED AND RESULTS OF TESTS:

4. VERBAL INSTRUCTIONS RECEIVED: (List any instructions given by Government personnel on construction deficiencies, retesting required, etc., with action to be taken.)

5. REMARKS: (Cover any conflicts in plans, specifications or instructions: acceptability of incoming materials; offsite surveillance activities; progress of work, delays, causes and extent thereof; days of no work with reasons for same.)

6. SAFETY: (Include any infractions of approved safety plan, safety manual, or instructions from Government personnel. Specify correctve action taken).

CONTRACTOR: _____

CONTRACTOR'S CERTIFICATION: I certify that the above report is complete and correct and that all material and equipment used, work performed and tests conducted during this reporting period were in strict compliance with the contract plans and specifications except as noted above.

_____
CONTRACTOR'S APPROVED AUTHORIZED REPRESENTATIVE

SECTION 01521
CONSTRUCTION SAFETY AND OCCUPATIONAL HEALTH

PART 1 GENERAL

1.1 SUMMARY

A. This Section specifies Contractor responsibilities for providing safety and occupational health for all persons authorized to be at the Project Site, and protection of property on and adjacent to Project Site.

1.2 RELATED DOCUMENTS

A. Regulations and Standards: Governing regulations and specific technical safety and health requirements for work performed at Project Site and incorporated into this construction safety and occupational health program include the following:

1. NFPA Code 241, Standard for Safeguarding Construction, Alteration, and Demolition Operations.
2. ANSI A10 series Standards for Safety Requirements for Construction and Demolition.
3. NFPA Code 51B, Standard for Fire Prevention during Welding, Cutting, and Other Hot Work.
4. NFPA 10, Standard for Portable Fire Extinguishers.

1.3 SUBMITTALS

A. Submit, in accordance with Section 01331, Construction Submittals, the following:

1. Construction Accident Prevention Plan (CAPP): Before beginning work at the Project Site.
2. Activity and Job Hazard Analysis: Prior to proceeding with performance of work involving unusual construction operations, work practices, or work involving hazardous materials. Do not proceed with work that has been identified as being potentially hazardous until Project Director/COR has expressed and recorded "no objection" to proposed methods and procedures.
3. Hazardous Work Permit Requests.
4. Material Safety Data Sheets (MSDS).
5. Minutes of Safety Related Meetings.
6. Records of Inspection: Make records of inspection available to Project Director/COR.
7. Accident Investigation Report: Submit report of each accident within twenty four (24) hours of accident or mishap, except as otherwise indicated by requirements or governing regulations.

1.4 SAFETY AND HEALTH PROGRAM MANAGER (SHPM)

A. Assign to the Project a SHPM whose duties shall be effective implementation, coordination, and enforcement of the CAPP.

B. Provide support to the SHPM for the duration of the Contract. Notices posted at Project Site shall name the SHPM and describe the authority held by the position.

C. Qualifications: Experienced construction industry professional having ability and authority to manage the CAPP; qualified to anticipate, identify, evaluate, and implement corrective action in relation to potential safety and health hazards and dangerous exposures.

PART 2 PRODUCTS (NOT USED)

PART 3 EXECUTION

3.1 GENERAL

A. Implement and manage a comprehensive safety and health program throughout the duration of construction covering both existing and developing conditions.

B. The Project Director/COR reserves the right to suspend work when and where Contractor's safety and health program is considered to be operating in an inadequate manner, has severe shortcomings, or is not in compliance with contractual requirements. This shall include failures to complete required submittals within the time periods specified.

C. Acceptance by Project Director/COR will not relieve Contractor of overall responsibility for compliance with the strict interpretation of all safety and health requirements of the Contract.

D. Safety and Health Regulations:

1. Establish and enforce clearly written, definitive rules to be followed by employees of Contractor, subcontractors, and separate contractors at Project Site, applicable for performance of each unit of work.
2. Prominently post notices in English, the host national language, and third country languages stating, if appropriate, that failure to comply with safety and health regulations may cause immediate termination of employment.
3. Post safety and health rules at the Project Site and provide a copy to the project manager for each Subcontractor prior to the commencement of work.

E. The SHPM shall report at regularly scheduled times with the Project Director/COR to:

1. Coordinate management of safety and health activities and actions for effective protection.
2. Determine implementation of new safety and health measures related to forthcoming construction activities.

3. Anticipate and analyze potentially hazardous conditions, and implement safe and healthy solutions.
4. Perform Activity and Job Hazard Analysis for work activities involving unusual construction operations, work practices, or work involving hazardous materials. Develop methods and procedures to reduce identified hazards to greatest extent possible.

F. Inspections:

1. Conduct frequent safety, health, and housekeeping inspections of temporary structures, fabrication shops, material, machinery and equipment at the Project Site.
2. Inspections and documentation of such shall be performed by qualified persons.
3. Documentation shall include any deficiencies encountered along with details and a timetable for corrective action.
4. SHPM shall identify and coordinate all safety, health, and housekeeping inspections, and shall verify, document, and ensure that all corrective actions have been implemented.
5. Records of inspection shall include documentation of safety, health, and housekeeping inspections and corrective actions and timetables associated with any deficiencies encountered. Documentation shall also be made available for verification that corrective actions were implemented.

G. Accident Investigation:

1. Investigate and prepare separate accident report for each accident resulting in lost time, disabling/fatal injuries, or damage to vehicles, property, materials, supplies, or to furniture, fixtures, and equipment.
2. Prepare reports on forms supplied by and in accordance with instructions of Project Director/COR.
3. Except as may be otherwise requested by Project Director/COR, report on Form (3-92) DS-1663; related instruction sheet available from the Project Director/COR.
4. Include in each report a statement of Contractor actions taken to prevent recurrence of accident.

H. Hazardous Materials: Test any material encountered that is suspected to contain hazardous substances and bring to the immediate attention of Project Director/COR. If, in the opinion of Project Director/COR, Contractor is not conducting sufficient testing, more may be required.

I. Hazardous Work Permits: Prepare written requests and obtain permits to perform the following construction operations:

1. Hot Work: Includes all work that results in open flame such as welding, cutting, brazing, and burning. Provide effective fire protection and prevention at all times during such operations.
2. Confined Space Entry: Includes work in enclosed areas such as storage tanks, bins, sewers, in-ground vaults, boilers, vessels, tunnels, manholes, pits, etc.
3. Internal Combustion Engines: Includes use of trucks, forklifts, pumps, or generators powered by petroleum-based fuel when used inside a building,

structure, or confined space.

4. Explosive Actuated Tools: Includes powder charged tools manufactured by Hilti, Remington, Ram Set, and others used for fastening purposes.

5. Protective Clothing and Equipment: Issue personal protective clothing/equipment as required by EM 385-1-1, latest edition. Leather boots must be worn by all employees engaged in construction work at the project site. Maintain all items in a serviceable condition.

J. Safety and Health Training:

1. General Orientation: Provide orientation for new employees regarding safety and health policies and work rules.
2. Specific Training:
   a. Provide specific training to supervisory personnel and all craft workers of the Contractor and Subcontractors in proper use and care of specific personal protective gear, equipment, and clothing.
   b. Provide specific training in the proper use of the full body harness and lanyard attachments to all craft workers performing tasks at elevations above ten (10) feet.
   c. Contractor and Subcontractor employees shall be trained and supervised by persons qualified to perform, safely and confidently, recognized hazardous work operations and work performed with hazardous conditions to which they have been assigned.

K. Tool Box Meetings: Conduct safety meetings once each week. Require attendance by all tradespersons, laborers, foremen, and supervisors at Project Site. Discuss current construction operations, analyze hazards, and communicate solutions.

3.2 CONSTRUCTION ACCIDENT PREVENTION PLAN (CAPP)

A. Prepare, prior to beginning work at the Project Site, a site-specific CAPP, and adhere to the accepted Plan throughout the duration of the Project.

B. See Attachment “A”, Example of a Construction Accident Prevention Plan. The CAPP shall contain, at a minimum, Contractor’s understanding of:

1. Management and Corporate Commitment: Include a certified statement in the introduction, executed by a senior officer of the construction firm, having broad corporate authority, indicating full commitment to accepted CAPP, and level of authority in assignment of responsibilities for implementation at the Project Site.
2. Name, qualifications, and duties of SHPM.
3. Requirements for meetings and inspections, and details as to how they will be conducted.
4. Activity and Job Hazard Analysis: Procedure for preparation and approval prior to proceeding with work involving unusual construction operations, work practices, or hazardous materials.
5. Hazardous Work Permits: Procedure for preparation and approval prior to proceeding with work deemed herein to be hazardous.
6. Health and Safety Training: Procedures for implementing training and orientation.
7. Emergency Plan: Solicit advice and recommendations from Project

Director/COR; plan to include:

a. Escape procedures and routes, method of accounting for employees following emergency evacuation, identification of source and location for rescue and medical assistance, means of reporting emergencies, and persons to be contacted for information or clarification.
b. Include total system response capabilities to minimize consequences of accidents, natural disasters, or other emergencies.
c. Emergency Resources: Establish, jointly with USG, a listing of telephone numbers and location of ambulance, physician, hospital, fire, police, and other sources of emergency assistance; also post listing conspicuously in several locations on Project Site.
d. Emergency Communication: Wireless telephone service shall be the preferred method. Communication access shall be available to site medical personnel and nearby medical clinic or hospital.
e. Quarterly Testing: Test emergency plans quarterly using drills to ascertain and ensure their effectiveness.
f. Integration of onsite emergency planning with off-site emergency support.
g. Limit the number of persons permitted in any location to rescue and escape capability, as determined by Contractor and in concurrence with Project Director/COR.
h. Emergency Alert System: Identify, select, install, and test system to alert all persons likely to be affected by existing or imminent disaster conditions, and to alert and summon personnel and equipment comprising emergency response capability.

3.3 TOOLS, EQUIPMENT, AND MACHINERY

A. Quality: Hand tools, power tools, equipment, machinery, materials, and personal protective apparatus shall be of internationally recognized testing laboratory for specific application for which they are to be used. They shall be quality products recognized for professional construction use, applications, and work practices.

B. Safe Clearance Procedure: Prior to initial use, and periodically thereafter at times of continued use, provide inspections of construction tools, equipment, and machinery. Do not permit continued use of tools, equipment, and machinery that are not in satisfactory working condition. Immediately upon identification of damage or malfunction, tag and remove from Project Site. Do not allow return of items until repaired or reprocessed in compliance with industry practice. Engage qualified persons to make such inspections and repair. Prepare written records, including recommendations for corrections of defects and misapplication.

C. Machinery and Mechanized Equipment:

1. Prior to being placed in use, all machinery and mechanized equipment shall be inspected and tested by qualified personnel and certified to be in safe operating condition. Maintain at Project Site records of tests and inspections; such records shall become part of the official project file.
2. Crawler cranes, truck and wheel mounted cranes, and material hoists shall be erected, tested, maintained, and repaired in accordance with the manufacturer's recommendations. All actions shall be documented. Operators of vehicles and mechanized equipment must be certified or trained. Every person operating a motor vehicle shall possess at all times,

while operating such a vehicle, a license/permit certification that affirms qualifications valid for the equipment being operated.

3. Hoisting Equipment: Provide general-use manufactured apparatus for hoisting and material handling equipment, suitable for Project configuration, that is, for the number of stories and similar considerations and for the suitable handling of materials, fabrications, tools, equipment, work platforms, and, where applicable, for the transportation of crafts persons between grade and floor levels.

D. Walking and Working Surfaces:

1. Any required scaffolding shall be a standard, medium- to heavy-duty welded tubular frame or a project-designed steel tube and clamp system. All components shall be manufactured and tested according to international standards. All types of manufactured scaffolding systems shall include the scaffold manufacturer's integrated access stairway sections, handrails, and walking platforms. Components from different manufacturers shall not be interchanged to form a complete system.
2. For all cast-in-place concrete installations of walls, columns, beams and slabs, provide manufacturer's standard access scaffolding and work platforms which are an integral part of a pre-engineered, reusable, factory built concrete forming/shoring system consisting of pre-fabricated modular metal framed plywood or all metal panels. Components from different manufacturers shall not be interchanged to form a complete system.
3. Protect openings in floor slabs of more than 0.03 square meters (46 square inches) in area. Provide guardrails at floor slab edges that are not yet permanently walled off, where located more than 1.25 meters (4 feet) above grade or adjoining floor/deck surface.

E. Access to Construction Operations: Provide ramps, stairs, ladders, and similar devices for craftsperson, inspector, authorized visitor, and USG personnel access and egress. The use of job-made "portable" step ladders is prohibited on all OBO construction project sites. Contractors must provide commercially manufactured fiberglass stepladders that meet the American National Standards Institute (ANSI) Type II, Commercial 225-lb duty rating.

F. Noise Reduction: Minimize the generation of noises through the efficient and shielded use of materials, tools, processes and procedures. Restrict the use of noise or impact-producing tools to necessary prosecution of the work. These actions shall seek to minimize complaints from nearby occupancies, and comply with requests of local authorities.

3.4 SITE MAINTENANCE, PROTECTION, AND SANITATION

A. General: Provide indirect, work-related, temporary support facilities and services as described below in conjunction with performance of work at Project Site.

1. Comply with Host Country governing regulations as enforced by authorities; including building codes, requirements of utility companies, and health/safety regulations by police/rescue/fire departments, environmental protection regulations, and similar applicable regulations.
2. Inspections: Arrange for required inspections, certifications and permits for installation. Keep the Project Director/COR informed of all progress.

3. Maintain temporary facilities in clean, sanitary, and safe operating conditions to the satisfaction of Project Director/COR; and do not allow conditions of use to become inefficient, overloaded, hazardous, or otherwise deleterious to the USG's interests.

B. Fire Protection:

1. Where possible, arrange jointly with Project Director/COR and local fire department to respond to calls for assistance and service in cases of fire emergency.
2. Provide temporary portable fire extinguishers complying with applicable provisions of NFPA 10, Standard for Portable Fire Extinguishers, and UL rated; multi-purpose dry chemical type, 5.0 kg size, UL-rated "4-A:60-B:C." Maintain unobstructed access to fire extinguishers.
3. Prohibit smoking.
4. During welding, cutting, and burning, comply with NFPA 51B in areas of fire-hazard exposure; provide stand-by fire-protection personnel, and adequate supervision of operations.

C. First Aid: At the project site establish and equip a first aid station. At least one person on the Project Site shall be trained and certified in first aid and CPR. If medical clinics or hospitals are accessible within five (5) minutes of the Project Site, such facilities may be approved by a licensed physician for use in lieu of a first aid station. As a minimum, each project site must have an Automatic External Defibrillator (AED) located at the first aid station and another at the Contractor's Office.

D. Barricades, Closures, and Traffic Control:

1. Provide substantial barricade-type closures and rails at locations where encroachment of a physically hazardous condition in construction is possible, for equipment, tradespersons, and others at or adjoining the Project Site.
2. Provide sidewalk bridge type protective structure where traffic, vehicular, and pedestrian cannot be excluded from hazardous areas under and nearby overhead work in progress.
3. Provide appropriate warning signs, flashing-type warning lights, and adequate general lighting at principal barricades which are not intended to be crash-proof.
4. Maintain barricades through periods of exposure to hazardous conditions.

E. Roadways, and Walkways:

1. Establish safe roadways and walkways in and around Project Site, and connecting to adjoining public thoroughfares.
2. Provide signage and other markings; include traffic control signage and signals as may be necessary and useful in controlling traffic and in restricting traffic from passing through other areas. Cooperate with local officials in the establishment and/or adjustments of street entrance/exiting signals and signs.
3. Do not allow established traffic passages to become encumbered or obstructed with work activities, materials, parked vehicles, equipment, and similar elements. In particular, keep established entrance and exit

passages clear for medical emergencies, escape, firefighting, and other emergency access and egress.

F. Environmental Protection: Provide facilities and services as may be required by governing authorities to protect the environment; as it may be affected by performance of the work at the Project Site, and elsewhere, wherever work is in progress. Minimize the generation of wastes and avoid the pollution of every element of the environment. Prohibit the discharging and accidental loss of substances from the construction process that could contaminate the atmosphere, surface or ground water, soil or subsoil.

G. Excavation and Demolition:

1. Prior to commencement of excavation or demolition, give notices to adjoining landowners or other parties as required.
2. Before excavation or demolition, examine structural condition of all adjacent structures or infrastructure, whether on site or on adjoining property. Where there is reason to believe planned excavation or demolition will cause damage to adjacent structures or infrastructure or result in unsafe conditions, cease excavation or demolition operations until means have been provided to ensure stability and safety. Such means may consist of sheet piling, shoring, bracing, underpinning, or equivalent.
3. Other protective provisions may include, at a minimum, temporary protective coverings or enclosures of adjoining work, warning signs, and similar provisions.

H. Dust Control: Where and when applicable, implement a suitable program for dust control in and around the Project Site, designed to reduce dust generation/distribution to reasonable levels. Coordinate with environmental protection program.

I. Rodent, Pest, and Vermin Control: Employ specialized services to eliminate or minimize the threat of deleterious effects from insects, animals, and other vermin at Project Site. Up to and at the time of Substantial Completion, the Project and Project Site shall be maintained relatively free of entrenched and harbored pests of every description. Employ only environmentally safe methods and products in the control of rodents, pests and other vermin. Material safety and data sheets must be provided for any products used on site.

J. Construction Site Sanitation and Health Facilities:

1. Portable Sanitation Facilities:
   a. Provide separate facilities for each sex.
   b. Toilets:
      1) Provide number of portable toilet facilities based on the anticipated maximum number of workers at Project Site.
      2) Install portable toilet facilities in accordance with manufacturer's instructions and as acceptable by Project Director/COR.
      3) Label facilities properly in English and the commonly understood local language. Pictograms shall be used.
      4) Maintain an adequate supply of toilet paper at all times.
   c. Lavatories:

1) Provide hand-washing facilities in close proximity to all portable toilet facilities.
2) Provide an adequate supply of hot (43 degrees C to 60 degrees C or 110 degrees F to 140 degrees F) and cold water. Mixing or combination supply fixtures are preferable.
3) At each lavatory, maintain an adequate supply of paper towels and skin-cleaning agent at all times.

d. Comply with the requirements of the authority having jurisdiction for sewage disposal. Where non-sewer waste disposal systems are permitted, they shall be of a type accepted by the local health authorities having jurisdiction. Maintain all disposal systems in a sanitary condition.

2. Drinking Fountains and Dispensers:
   a. Provide an adequate number, distributed around the Project Site and service support areas for convenience and efficiency. Maintain an adequate supply of sanitary disposable paper cups and waste receptacles at each water dispenser.
   b. Provide bottled drinking water where piped potable water service is not available.
3. Waste Handling:
   a. Provide proper and adequate segregated waste containers for the collection and removal of waste materials in different categories. Categories include, but are not limited to: hazardous wastes, flammable wastes, sanitary and health-care wastes, garbage, wastes for recycling as required by local authorities, inert and dry wastes, and incidental debris from the construction process.
   b. Dispose of general non-organic wastes at maximum seven (7) day intervals.
   c. Dispose of organic, garbage, and similar temperature-sensitive wastes at maximum three (3) day intervals when the average outdoor daily maximum temperature can be expected to be above 18 degrees C.
   d. Clean waste containers regularly and adequately.
   e. Dispose of wastes in a lawful manner.
   f. Maintain, on a daily basis, the Project Site clean and clear of accumulated wastes, including surplus materials, trimmings, incidental demolished work, and construction debris. Clean completed elements and portions of work and maintain in broom clean condition.

3.5 SUPPLEMENTS

A. The Supplements, listed below, following “End of Section”, are a part of this Specification:

1. Attachment A – Example of a Construction Accident Prevention Plan (CAPP).

END OF SECTION

<<< The following document is an example of a CAPP >>>

- -

U.S. DEPARTMENT OF STATE
OVERSEAS BUILDINGS OPERATIONS

Project Name & CONTRACT No. ----------

CONSTRUCTION ACCIDENT PREVENTION PLAN (CAPP)

NAME OF CONTRACTOR:

POLICY.
The (name of Contractor) accident prevention policy, ensures that all employees have a firm understanding of company's position regarding the protection of all persons, public, and property during all phases of new construction and renovation works of U.S. Department of State buildings. In implementation of the accident prevention policy, (name of Contractor) accepts full responsibility for the establishment and implementation of an effective construction safety and occupational health program at the project site.

PURPOSE.
The Construction Accident Prevention Plan (CAPP), herein, establishes organizational and management elements necessary to implement an effective Safety and Health Program. The CAPP, as a policy and management document, shall comply with the latest edition, of the U.S. Army Corps of Engineers Safety and Health Requirements Manual EM 385-1-1, latest edition.

The objective of (name of Contractor) is to provide for a safe working construction environment, strong safety awareness by supervisors and workers, and the safe use of tools, machinery and equipment.

The (name of Contractor) shall ensure that hand tools, power tools, equipment, machinery, materials, and personal protective apparatus shall be of manufacturer listed by U.S. or internationally recognized testing laboratory for specific application for which they are to be used. They shall be quality products recognized for professional construction use, applications, and work practices.

REFERENCE DOCUMENTS. The Project shall comply with the following regulations:

- OSHA Hazard Communication Standard, 29 CFR 1910.1200(b)(4)(ii) for MSDS.
- U.S. Army Corps of Engineers, *Safety and Health Requirements Manual,* EM 385-1-1, latest edition.
- U.S. Department of State Foreign Affairs Manual Volume 6 Subchapter 610, *Safety Health and Environmental Management Program*, with latest changes.

ORGANIZATIONAL/ADMINISTRATIVE RESPONSIBILITY FOR CAPP.
Mr./Ms. (name), the Project Manager, has full authority, responsibility, and support by (name of Contractor) for the administration and implementation of the CAPP.

Safety and Health Program Manager (SHPM).

To assist Project Manager, a qualified Safety and Health Program Manager (SHPM) shall be appointed to administer and implement the (CAPP). The Project Manager and the Safety and Health Program Manager have corporate responsibility and authority to identify unsafe and unhealthful conditions and to take corrective action to abate or eliminate such conditions. The SHPM is a qualified, experienced, construction industry professional possessing the ability and authority to manage this CAPP. The SHPM shall anticipate, identify, evaluate, and implement corrective action to abate or reduce potential safety and health hazards and dangerous exposures.

PROGRAM MANAGEMENT REQUIREMENTS.

Emergency Plans.
(name of Contractor) shall establish jointly with Project Director/COR, in the event of fire or other emergency, Emergency Plans for the safe evacuation of all persons at the Project Site. Emergency Plans that are relative to (name of Contractor) construction operations will be submitted to the Project Director/COR for acceptance. Plans will be tested/evaluated monthly to ascertain their effectiveness.

First Aid Station.

First Aid: At the project site establish and equip a first aid station. At least one person on the Project Site shall be trained and certified in first aid and CPR. If medical clinics or hospitals are accessible within five (5) minutes of the Project Site, such facilities may be approved by a licensed physician for use in lieu of a first aid station. As a minimum, each project site must have an Automatic External Defibrillator (AED) located at the first aid station and another at the Contractor's Office.

Activity and Worker Hazard Analysis.
The Project Manager and SHPM will assess safety and health issues associated with special construction activities in the schedule. Prior to each major phase of the work, the Project Manager will prepare and submit an Activity and Worker Hazard Analysis report to the Project Director/COR for acceptance.

Safety Training and Orientation.
"New Hire" training will be conducted by the Contractor. New employees to the Project Site will be required to attend an employee safety orientation program, at which time, safety rules shall be explained by the SHPM.

A copy of the project safety rules shall be given to each new employee, who shall be required to sign a statement stating that they have been instructed in the safety philosophy of the company, have been given a copy of the project safety rules, and understand them.

In addition, all employees shall observe and obey rules at Post governing the conduct and behavior of persons performing construction work in an occupied U.S. Department of State facility.

Violation of Safety Rules.
(name of Contractor) shall initiate a procedure/mechanism to discipline all workers who repeatedly violate safety rules. (Example: the procedure may include the termination of an employee after one verbal and two written warnings for the same violation).

Tool Box Safety Meetings – Coordination and Communication.
To ensure better safety and health awareness, (name of Contractor) shall communicate, through weekly Tool Box meetings, a corporate safety and health philosophy to all construction personnel. Records of attendance and documentation of topics for each meeting will be kept. Topics will include but not be limited to protection of employees, personal protective clothing/equipment, fall protection, fire prevention, fire protection, emergency evacuation procedures, and the safe use of power tools and machinery.

Material Safety Data Sheets.
Material Safety Data Sheets (MSDS) for all hazardous chemical substances in use on Project Site shall be obtained from the manufacturer and kept on Project Site. Workers who are assigned to work with hazardous substances shall be trained in the proper procedures and precautionary measures to be taken while using such substances/products.

Safe Clearance Procedure.
Prior to initial use, and periodically thereafter at times of continued use, (name of Contractor) shall inspect all construction tools, equipment and machinery. (name of Contractor) shall not permit continued use of tools equipment and machinery which are not in good condition. Damaged or malfunctioning tools or equipment shall be tagged and immediately removed from service.

Hazardous Work Permits.
(name of Contractor) and subcontractors shall submit written requests to Project Director/COR for Hazardous Work Permits when construction operations include the following:

1. Hot Work. Work that results in open flames such as welding, cutting, brazing and burning. (name of Contractor) shall provide effective fire protection and prevention at all times during such operations.
2. Confined Space Entry. Work in enclosed areas such as storage tanks, bins, sewers, in-ground vaults, boilers, tunnels, manholes etc.
3. Internal Combustion Engines. Use of trucks, forklifts, pumps, or generators, powered by petroleum-based fuel, when inside a building structure or confined space.
4. Explosive Actuated Tools.

Temporary Electrical Power.
(name of Contractor), if requested, shall submit to Project Director/COR, for acceptance, a plan of proposed temporary power distribution and the means of protection of all circuits including receptacles, grounding, and ground fault circuit interrupters.

Inspections.
Under the direction of the SHPM, (name of Contractor) shall provide for frequent safety, health, and housekeeping inspections of Project Site. Temporary structures, fabrication shops, material storage areas, all machinery, tools and equipment shall be inspected to ensure compliance with USACE Safety and Health Requirements Manual EM 385-1-1, latest edition. Records of inspections and a timetable for corrective action shall be maintained.

Reporting Work Related Injuries.

All work related injuries shall be reported to Project Director/COR. A daily log of first aid treatment shall be kept at the location of the first aid station. Injuries requiring off-site medical treatment shall be reported to Project Director/COR. An accident report shall be completed by a supervisor or foreman for each work related injury or illness resulting in lost time.

Accident Investigation

All accidents involving death, multiple hospitalizations, or excessive property damage shall be officially investigated and reported under the authority and direction of the Project Director/COR.

SECTION 01771
CLOSEOUT PROCEDURES

PART 1 GENERAL

1.1 SUMMARY

A. The requirements of this Section relate to the procedures and administration of Substantial Completion, Final Acceptance, and Warranty.

1.2 SUBMITTALS

A. Submit, in accordance with Section 01331, Construction Submittals, the following:

1. Request for Certification of Substantial Completion.
2. Request for final inspection and testing.
3. Final Record Documents: Submit to Project Director/COR with request for inspection and Substantial Completion, marked "As-Built" documentation.

1.3 WARRANTY MANAGEMENT AGENT

A. Make available a qualified representative knowledgeable in the operation and maintenance of the various building systems as installed in the work who shall be responsible for warranty management.

B. Agent shall be qualified to address, record, and resolve warranty issues during the warranty period, and shall be certified by Contractor to act on its behalf during the warranty management period.

C. Agent, at a minimum, shall perform the following duties:

1. Communicate and coordinate actions with the responsible, local USG representative.
2. Be responsive to building systems deficiencies, including inspection, evaluation, and documentation of same.
3. Arrange for repairs or replacements of warrantable deficiencies.
4. Document issues, actions, and solutions; incorporate records as a part of the project document set and surrendered them to the local USG representative upon termination of warranty period.
5. Record and develop a report on expected times between failure of system components.
6. As a follow up to warranty actions, review procedures with USG operating and maintenance staff to verify they are executing their responsibilities in accordance and compliance with building systems procedures so as to avoid conditions that might lead to warranty action or denial of action.

PART 2 PRODUCTS (NOT USED)

PART 3 EXECUTION

3.1 GENERAL

A. Comply with instructions of Contracting Officer and Project Director/COR for procedures, sequence, timing, and similar considerations for the turning over of facilities to USG personnel.

3.2 SUBSTANTIAL COMPLETION

It shall be according to the Contract Clauses.

3.3 FINAL ACCEPTANCE

It shall be according to the Contract Clauses.

3.4 WARRANTY

A. Warranty Period: A twelve (12) month warranty period on all facility components and systems shall commence on the date of Final Acceptance. In the event that the USG elects to formally accept certain components or systems prior to Final Acceptance of the facility, the dates of formal acceptance of such facility components and systems are the commencement dates for their respective warranty periods.

B. Warranty Management:

1. Provide USG with a high level of assurance that delivered building systems are free of defect, that specified warranties are valid, that Support systems and methodologies are in place, and that USG support staff has a full understanding of the continued operation and maintenance of systems.
2. The period of warranty management coverage is logically greater than the individual system warranty periods.
3. Commence early in the start-up phase and end at a period normally one (1) year (12 months) from the issuance of Final Acceptance certification, unless otherwise agreed upon.

3.5 CLEANING

A. Final Cleaning:

1. Immediately prior to the time(s) of Project Director's/COR's inspection(s) of work for Certification of Substantial Completion, complete cleaning operations.
   a. Use experienced cleaning personnel.
   b. Use proven methods and materials to achieve the level of cleanliness normally expected for a U.S.-located, first-class, commercial or institutional building project.
2. In addition to specific cleaning as may be required by related technical specification sections hereof, comply with the following as applicable:

a. Comply with governing regulations, including safety standards and environmental protection regulations.
b. Waste:
    1) Do not burn waste materials at Project Site.
    2) Dispose of waste materials in a lawful manner, and do not bury at Project Site, except as may be authorized by Project Director/COR.
    3) Remove rubbish, debris, and litter.
c. Dispose of surpluses as required by the Contract.
d. Do not discharge volatile and other dangerous or deleterious fluids into drainage systems.
e. Temporary Facilities and Substrates:
    1) Remove temporary facilities and construction tools, equipment, and devices including temporary buildings, enclosures, and protective coverings.
    2) Where permanent facilities were used for temporary service, restore to prior condition.
    3) Restore substrates as required.
    4) For additional details, refer to Section 01501, Temporary Facilities and Controls.
f. Clean the applicable portions of the Project Site, including landscape development areas and site improvements.
g. Sweep the paved areas to a broom-clean condition and remove stains, including water stains, petrol-chemical spills and similar deposits.
h. Rake grounds that are neither paved nor planted, to a smooth even-textured surface.
i. Remove debris and dust from limited-access spaces of Project including roofs, plenums, crawl spaces, shafts, tunnels, trenches, equipment vaults, manholes, attics, and similar spaces.
j. Clean exterior and interior exposed surfaces to a dirt-free condition, free of stains, graffiti, films, and other noticeable and deleterious substances.
k. Restore reflective polishes, and applied treatments, including sealed and waxed finishes.
l. Vacuum clean interior exposed non-treated concrete surfaces and vacuum clean carpeted areas and other soft surfaces after removal of spots and stains.
m. Avoid disruption of natural weathering, which may be underway on certain exposed exterior surfaces.
n. Wipe accessible surfaces clean on mechanical, electrical, and similar equipment and fixtures, including lighting fixtures.
o. Remove excess lubrications and similar substances.
p. Remove exposed-to-view labels not required as permanent labels.
q. Clean transparent materials, including glazed panels and mirrors, to a polished condition free of visible dirt and films with sealant trimmed away neatly.
r. Replace broken and noticeably abraded glass and plastic units.

B. Jointly inspect the entire Project Site with Project Director/COR.

END OF SECTION

SECTION 01781
OPERATION AND MAINTENANCE DATA

PART 1 GENERAL

1.1 SUMMARY

A. Section includes administrative and procedural requirements for the preparation and submission of Operation and Maintenance Data.

1.2 SUBMITTALS

a. Submit, in accordance with Section 01331, Construction Submittals, the operation and maintanance data. Submit two (2) hard copies and one (1) CD-ROM version prior to Substantial Completion.

PART 2 PRODUCTS (NOT USED)

PART 3 EXECUTION

3.1 OPERATION AND MAINTENANCE (O&M) MANUAL

A. Develop for building systems, equipment, products and finishes; include the following:
   1. General system or equipment description.
   2. System or equipment identification, including:
      a. Name of manufacturer.
      b. Model numbers.
      c. Component serial numbers.
   3. Design factors and assumptions.
   4. Name, address, and contact information of each Subcontractor responsible for installation of the equipment or system.
   5. Detailed operating procedures, parameters, and tolerances.
   6. Servicing requirements, maintenance procedures, and schedules including turnaround cycles.
   7. Inspection and test procedures.
   8. Troubleshooting guides.
   9. Precautions against improper use and maintenance.
   10. Disassembly, repair, and re-assembly instructions.
   11. Safety and emergency instructions.
   12. Applicable product data, shop drawings, wiring diagrams, flow charts, and sequence of operation.
   13. Performance curves.
   14. Material Safety Data Sheets.
   15. Warranty information, including copies of warranties, warranty forms, and warranty expiration dates.

B. Inventory of Facilities, Equipment, and Systems: Include, at a minimum:

1. Facility name and building ID number.
2. Equipment type, specific location, manufacturer, make, model, size, capacity, serial number.
3. Information which is pertinent to assist in efficient operation and maintenance of the facility.

C. Use personnel thoroughly trained and experienced in operation and maintenance of the equipment and systems involved.

D. Where written instructions are required, use personnel skilled in technical writing where necessary for communication of essential data.

E. Where drawings or diagrams are required, use experienced personnel capable of preparing said drawings in a clear, understandable format.

F. Disclaimer Limitations: Manufacturer's disclaimers in published product warranties shall not relieve Contractor of Contract requirements on related product or work.

3.2 POSTED INSTRUCTIONS

A. Operation and Maintenance Instructions:

1. Except as otherwise indicated, post at facility components, building systems, and each principal unit of operational equipment, including safety, security, and protective equipment/system/devices. Instructions shall include, but not be limited to:
   a. Wiring diagrams.
   b. System piping.
   c. Wiring layouts.
   d. Valves.
   e. Control sequences.
2. Post in English and host country predominant language and, for emergency-type postings, include international form of pictorial-graphic signage.
3. Mounting and Location:
   a. Attach on or locate near each component, system, or piece of equipment.
   b. Frame in glass, Plexiglas, or similar material.
   c. Illuminate, as necessary, to ensure readability.
   d. Provide protected, tamper-resistant signage, of a permanent nature for the exposure conditions in each case.
   e. Locate for convenience of operating and maintenance personnel, but concealed from others, except in the case of general-usage and emergency facilities.

B. Equipment Dataplates:

1. Provide permanent information plate on each item of operating equipment which is connected with services, has operating parts, or is

likely to require servicing, parts replacements, control, testing, or similar care and maintenance.

2. Locate inconspicuously, but allow for ease of operating, maintenance, and replacement procedures.
3. Provide appropriate information on dataplate in each case, including the following minimum data as applicable:
   a. Name of manufacturer and product.
   b. Date of manufacture and installation.
   c. Model designation and serial number.
   d. Capacity, speed, service rating, weight, and similar operational data.

C. Labels and Nameplates:

1. Provide permanent product labels and nameplates, including certified compliance stamps and similar required product markings.
2. Locate labels and nameplates accessible, but not readily visible to general occupants from either exterior or interior.
3. Except as otherwise indicated, limit size of plates and printing for ease of reading from distance of 350 mm.
4. Except for required safety/emergency signage, do not provide permanently attached labels, nameplates, trade names, trademarks, and similar markings on product surfaces exposed to view by general occupants of Project.
5. Comply with Project Director's/COR's requests for removal of non-required markings, and for removal/replacement or refinishing of products disfigured by such markings.

END OF SECTION